NOAA Coastal Hazards Resilience Workshop: Rip Currents and Wave Run-up April 14-16, 2015 Old Dominion University VAMSC Suffolk, VA

Draft Participant Agenda (updated 6 Apr 2015)

Tuesday 14 April - Rip Current Modeling and Validation

| 8:00 | Registration |
|-------|--|
| 8:45 | Welcome, Introduction to Workshop and Orientation to Day 1 Activities |
| 9:15 | Overview of the NWPS and NOS' probabilistic rip current forecast model Andre van der Westhusysen (NCEP/EMC):Nearshore Wave Prediction System |
| | Greg Dusek (NOS/CO-OPS): NOS' probabilistic rip current forecast model |
| 10:15 | BREAK |
| 10:45 | USLA/NWS/Sea Grant Rip Current Pilot Project Michael Churma (NWS/STI/MDL), Nicole Kurkowski (NWS/STI): USLA/NWS/Sea Grant Rip Current Pilot Project |
| | Chris Brewster (USLA), Peter Davis (USLA): USLA's perspective of Rip Current Pilot Project |
| 11:15 | Review of Validation Efforts Tom Lonka (WFO Newport, NC): Weather Forecast Office Morehead City: Local Efforts to Recruit Lifeguard Rip Current Reports |
| | Pablo Santos (WFO Miami): Weather Forecast Office Miami: Local Efforts to Recruit Lifeguard Rip Current Reports |
| | Charlie Paxton (WFO Tampa): Weather Forecast Office Tampa: Local Efforts with Mote Marine Laboratory |
| 12:30 | LUNCH |
| 1:45 | Develop Strategy to Implement Forecast Model Operationally Facilitated Group Activity with strategic breaks included to: |
| | #1) Identify steps required to expand and transition the probabilistic rip current |

forecast model to NWS operations. (Facilitators: Andre van der Westhuysen and Rich Bandy)

- #2) Discuss model validation strategies and NOAA engagement with lifeguards. (Facilitators: Greg Dusek and Michael Churma)
- #3) Discuss lessons-learned and best practices of USLA Rip Current Pilot Project. How can NOAA's rip current observation reporting webform be tailored to meet needs for validation of rip current forecast model? (Facilitators: Nicole Kurkowski and Wayne Presnell)
- #4) Discussion on training required for National Weather Service Offices (for using/validating model and working with lifeguards/observations). (Facilitators: Pablo Santos and Danielle Nagele)

5:00 Summary and Adjourn

Wednesday 15 April - Rip Current Communication/Messaging

| 8:00 | Doors Open |
|------|--|
| 8:30 | Welcome, Introduction to Day 2 Activities on Rip Current Communication/Messaging |
| 8:45 | Current Messaging Efforts Wayne Presnell (NWS/AFS): NWS Messaging, including "Break the Grip of the Rip" and Messaging at WFOs; Beach Forecast Webpage |
| | Chris Brewster (USLA), Peter Davis (USLA): USLA Feedback on NWS Messaging |
| | Wendy Carey (Delaware Sea Grant), Spencer Rogers (North Carolina Sea Grant): Summary of Science |
| | Rob Brander (UNSW Australia): Messaging in Australia |
| | Bob Dukesherer (WFO Grand Rapids), Brian Hirsch (NWS/Central Region HQ): Great Lakes Social Science |

Brent Schleck (MN Sea Grant; remotely): Great Lakes Communication Project

and Additional Information

| 10:30 | BREAK |
|--|---|
| 11:00 | Examples of Visualizations of Rip Current Model Output/Forecast Web Pages Greg Dusek (NOS/CO-OPS): Google Style Interface for NOS' probabilistic rip current forecast model Pablo Santos (WFO Miami): Rip Current Forecasts From the Web at Weather |
| | Forecast Office Miami, FL |
| 12:00 | LUNCH |
| Rip Current Participants Track 1:30 – 4:30 | Focus Groups Discuss Rip Current Messaging (Breaks at 2:30 and 4:00) Facilitated Focus Group Activity with strategic breaks included to explore: #1) NWS overall rip current messaging – Discuss if updates are needed and incorporate Great Lakes study findings; changes to "Break the Grip of the Rip" graphics/messaging; standardization among forecast offices #2) Probabilistic rip current forecast model communication and visualization: Google-style interface review; forecaster communication of model output through existing products. |
| Wave Run Up Participants Track 1:30 – 4:30 | Field Exercise: Train NWS staff on Surveying Wave Runup Forecast Points |
| 4:30 - 5:00 | Summary and Wrap-Up |

Thursday 16 April - Wave Run-up Forecast Modeling/Communication

| 8:00 | Doors Open |
|-------|--|
| 8:30 | Welcome and Introductions to Day 3 Activities on Wave Run-up Forecast Modeling/Communication |
| 8:40 | Wave Run-Up Modeling, WFO Wave Run Up Activities |
| | Tony Mignone (WFO Caribou): Overtopping Sea Walls |
| | John Cannon (WFO Gray): NART Wave Run-up Project |
| | Hayden Frank (WFO Taunton) – Overview of the WFO Taunton Coastal Flood Program |
| | Andre Van Der Westhuysen (NCEP/EMC): Nearshore Wave Prediction System Model Update |
| 10:20 | BREAK |
| 10:50 | Wave Run-Up Modeling, WFO Wave Run Up Activities (cont'd) |
| | Joseph Long (USGS), Charlie Paxton (WFO Tampa), Donnie King (WFO Newport, NC): Parameterized Wave Run-Up For Use in Forecasts of Coastal Change Hazards & Initial Testing at WFOs Newport, NC and Tampa Bay, FL |
| | Carlos Anselmi (WFO San Juan): Wave and Surge Operational Forecasting For Puerto Rico and U.S. Virgin Islands |
| 12:00 | LUNCH |
| 1:30 | Strategy Development for Implementation of wave run-up modeling and communication/integration into NWS/NOS products Facilitated Group Activity with strategic breaks included to: |
| | #1) Identify a path forward to implement wave runup forecasting across the southeastern US and Caribbean, where the coast is ever changing due to erosion. What changes to methodology are necessary to implement for locations with sand dunes? (Facilitator: Rich Bandy; Notetaker: Jeff Orrock) |

- #2) Discuss ways to utilize NWPS output to potentially model wave run-up as well as erosion/overwash/inundation for an entire coastline. (Facilitator: Andre van der Westhuysen; Notetaker: Tony Mignone)
- #3) Explore needs of the users/partners for forecast information for wave run-up and erosion/overwash/inundation. (Facilitator: Rich Okulski; Notetaker: John Cannon)

5:00 Summary and Wrap-Up